

**CLAIMS:**

1. A medical facility data communications system, the system comprising:

an internal data communications network;

5 a plurality of clients coupled to the internal network and uniquely addressed on the internal network; and

a data communications control system coupled to the internal network for receiving (client data) from the clients, transmitting client data to a remote service provider, receiving addressed data from the remote service provider, and distributing  
10 the addressed data to the clients.

2. The system of claim 1, wherein the internal data communications network includes at least one local area network.

15 3. The system of claim 2, wherein the internal data communications network includes a high speed Ethernet network.

4. The system of claim 1, wherein the clients include at least one medical imaging system configured to produce image data.

20 5. The system of claim 4, wherein the at least one imaging system is selected from a group including medical resonance imaging system, computed tomography systems, ultrasound systems, and x-ray systems.

25 6. The system of claim 1, wherein the clients include a hospital information system.

7. The system of claim 1, wherein the clients include a radiology department information system.

30 8. The system of claim 1, wherein the clients include a picture archiving and communication system.

9. The system of claim 1, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.

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10. The system of claim 9, wherein the data accessed includes operational parameters of the clients.

11. The system of claim 9, wherein at least one of the clients is a mobile client, and wherein the data accessed includes location of at least the mobile client.

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12. The system of claim 11, wherein the location of the at least one mobile client is accessed in response to connection of the at least one mobile client to the internal network.

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13. The system of claim 1, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.

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14. The system of claim 1, further comprising an external network interface for exchanging client data and addressed data between the data communications control system and the remote service provider.

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15. The system of claim 14, wherein the external network interface includes an interface for at least two different data communications media.

16. The system of claim 1, wherein all data communications between selected clients and the remote service provider are routed through the data communications control system.

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17. A data communications system for a medical diagnostic facility, the system comprising:

a plurality of clients linked to an internal network, the clients including a medical diagnostic imaging system;

5 a data communications control system linked to the internal network for receiving client data from the clients, distributing addressed data to the clients, transmitting client data to a remote service provider and receiving addressed data from the remote service provider; and

10 an external network interface coupled to the data communications control system for transmitting the client data to the remote service provider and for receiving the addressed data from the remote service provider.

18. The system of claim 17, wherein the client data includes operational data for evaluating performance of the medical diagnostic imaging system.

19. The system of claim 17, wherein the internal network is a local area network and the external network is a wide area network.

20. The system of claim 19, wherein the internal network is an Ethernet network.

21. The system of claim 19, wherein the wide area network includes the Internet.

22. The system of claim 17, wherein the clients include a hospital information system.

23. The system of claim 17, wherein the clients include a radiology department information system.

24. The system of claim 17, wherein the clients include a picture archiving and communication system.

25. The system of claim 17, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.

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26. The system of claim 25, wherein the data accessed includes operational parameters of the clients.

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27. The system of claim 25, wherein at least one of the clients is a mobile client, and wherein the data accessed includes location of at least the mobile client.

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28. The system of claim 27, wherein the location of the at least one mobile client is accessed in response to connection of the at least one mobile client to the internal network.

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29. The system of claim 17, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.

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30. The system of claim 17, wherein the data communications control system is configured to store and execute communications interface routines interactively with the clients.

31. The system of claim 30, wherein the communications interface routines include a web browser routine.

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32. A communications system for a medical diagnostic facility, the system comprising:  
an internal network;

a plurality of clients configured for connection to the network for transmission of client data and for receipt of addressed data, the clients including a physically mobile client; and

5 a data communication control system coupled to the internal network and to an external network for communicating client data and addressed data between the clients and a remote service provider, the data communications control system being configured to automatically access client data including data indicative of a location of the mobile client.

10 33. The system of claim 32, wherein the control system is configured to detect the location of the mobile client upon connection of the mobile client to the network.

15 34. The system of claim 32, wherein the clients include a medical diagnostic imaging system, and wherein the client data includes operational data for evaluating performance of the medical diagnostic imaging system.

20 35. The system of claim 32, wherein the internal network is a local area network and the external network is a wide area network.

36. The system of claim 32, wherein the internal network is an Ethernet network.

25 37. The system of claim 36, wherein the wide area network includes the Internet.

38. The system of claim 32, wherein the clients include a hospital information system.

30 39. The system of claim 32, wherein the clients include a radiology department information system.

40. The system of claim 32, wherein the clients include a picture archiving and communication system.

41. The system of claim 32, wherein the data communications control system is configured to access data from networked clients in accordance with a predetermined data acquisition routine.

42. The system of claim 41, wherein the data accessed includes operational parameters of the clients.

43. The system of claim 32, wherein the data communications control system includes an operator interface, and wherein the system is configured to access data from networked clients in response to an operator request input via the operator interface.

44. The system of claim 32, wherein the data communications control system is configured to store and execute communications interface routines interactively with the clients.

45. The system of claim 32, wherein the communications interface routines include a web browser routine.

46. A method for communicating data in a medical diagnostic facility, the method comprising the steps of:

- (a) transmitting client data from a plurality of networked clients to a data communications control system via an internal network;
- (b) processing the client data in the data communications control system;
- (c) transmitting at least a portion of the client data from the data communications control system to a remote service provider via an external network.

47. The method of claim 46, comprising the further steps of receiving addressed data from the remote service provider via the data communications control system, and distributing the addressed data to an intended client via the internal network.

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48. The method of claim 46, wherein the client data is transmitted to the data communications control system in response to a request from the control system.

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49. The method of claim 48, wherein the control system includes an operator interface, and wherein the request is generated via the operator interface.

50. The method of claim 46, wherein the client data is transmitted to the control system in a transmission created by operator intervention at the client.

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51. The method of claim 50, wherein the transmission is created via an interface routine executed interactively by the control system and client.

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52. The method of claim 51, wherein the interface routine includes a web browser application.

53. The method of claim 46, including the step of storing client data for access by the control system.

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54. The method of claim 46, including the step of logging communications between the clients and the control system.

55. A method for managing data communications in a medical diagnostic facility, the method comprising the steps of:

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(a) coupling a plurality of clients to an internal network, the clients including at least one physically mobile client;

(b) transmitting client data from the clients to a data communications control system, the client data including at least data indicative of a location of the at least one mobile client; and

(c) storing the client data.

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56. The method of claim 55, wherein the client data indicative of the location of the at least one mobile client is transmitted upon connection of the at least one mobile client to the network.

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57. The method of claim 55, comprising the further step of accessing client data representative of performance of the clients.

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58. The method of claim 55, wherein the control system includes an operator interface, and wherein client data is accessed via the internal network in response to operator intervention via the interface.

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59. The method of claim 55, comprising the further step of transmitting at least a portion of the client data to a remote service provider via an external network.

60. The method of claim 55, comprising the further steps of receiving addressed data at the control system via an external network, and distributing the addressed data to an intended client.